

CIMPA Research School on Combinatorial and Computational Algebraic Geometry

University of Ibadan, Oyo State, Nigeria, 11–24 June 2017.



SCIENTIFIC COMMITTEE:

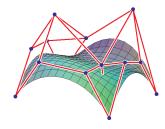
Dr. H. Praise Adeyemo, (University of Ibadan), Co-chair.

Erwan Brugallé, (École polytechnique), Co-chair.

Victoria Powers, Emory University.

Frank Sottile, Texas A&M University.





OVERVIEW

This research school will cover some basics of algebraic geometry with an emphasis on its computational aspects, such as Gröbner bases, and on its combinatorial aspects, such as toric varieties and tropical geometry. Some courses will present applications of algebraic geometry. Participants will learn how to use the software Macaulay2 for studying algebraic varieties. There will be seven short courses, with daily problem/computer sessions, and a daily seminar.

This school is aimed at faculty and advanced graduate students from Nigeria and neighboring countries. We expect 40 participants with 25 from Nigeria and 15 from elsewhere in Africa. Accepted participants will be fully supported.

Lecturers and Courses

Dr. H. Praise Adevemo, University Ibadan, Ibadan, Oyo, Nigeria. Ideals and varieties.

Dr. Erwan Brugallé, École polytechnique, Paris, France. Introduction to enumerative geometry of plane curves.

Dr. Damian Maingi, University of Nairobi, Kenya. Gröbner bases.

Prof. Victoria Powers, Emory University, Georgia, USA. Positive polynomials and sums of squares.

Dr. Kristin Shaw, Technische Universität Berlin, Germany. Applications of tropical geometry to discrete and classical algebraic geometries.

Prof. Frank Sottile, Texas A&M University, College Station, USA. Toric ideals and combinatorics.

Prof. Bernd Sturmfels University of California, Berkeley, USA. Eigenvectors of tensors.

Application Procedures

Applicants from Nigeria: Send a CV and a brief letter of application to Dr. Adeyemo explaining why you wish to attend the school. There will be a deadline in Winter 2017.

Applicants from outside Nigeria: Apply through CIMPA (from their web page for the research school). Deadline: 5 February 2017.

All applicants are encouraged to contact Dr. Adeyemo or Prof. Sottile.

FOR MORE INFORMATION

View the CIMPA webpage for the school, accessible from http://www.cimpa-icpam.org/ Organizer's web page: www.math.tamu.edu/~sottile/conferences/CIMPA17

Contacts

Dr. H.P. Adeyemo: praise.adeyemo13@gmail.com

Prof. Frank Sottile: sottile@math.tamu.edu